

Salinas River Watershed Management Action Plan



Central Coast Regional Water Quality Control Board
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SALINAS RIVER WATERSHED MANAGEMENT ACTION PLAN

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SALINAS RIVER WATERSHED MANAGEMENT ACTION PLAN

Executive Summary

The purpose of the Salinas River Watershed Management Action Plan is to describe the Central Coast Regional Water Quality Control Board's (Regional Board) approach to watershed management for the Salinas River drainage area. The goal of watershed management is to more effectively protect and improve water resources by supporting development of local solutions to local problems. The Regional Board has broad authority to control both point source and nonpoint source pollution through implementing Federal and State laws and regulations. Historically, most effort has focused on controlling point source pollution through a system of federal and state permits and enforcement actions. However, many significant identified water quality impacts in the Salinas River watershed, such as erosion and sedimentation, nitrates in ground water and surface waters, and older, discontinued pesticides in sediments and animal tissues, are primarily associated with nonpoint pollution sources. Additionally, widespread pumping of ground water has contributed significantly to seawater intrusion into coastal aquifers. The result is another significant nonpoint source impact to both water quantity and quality.

Typically, nonpoint source pollution results when water moves across the landscape and picks up pollutants from roads, parking lots, lawns, agricultural fields, mining areas, construction sites and other land uses. These pollutants are carried into streams, rivers and ground water, where they affect water quality and the beneficial uses of the waters. Control of nonpoint source pollution requires the efforts of individuals, local governments and resource agencies. An effective watershed approach, emphasizing cooperative solutions, increased education, and development of partnerships, will improve control of nonpoint source pollution, while enabling the Regional Board to continue effective oversight and control of point source discharges.

The most significant elements of the Regional Board's watershed approach include devoting additional resources (staff time and grant funding) to watershed activities, increasing Regional Board presence in the watershed through developing partnerships with landowners, local governments, resource agencies, and other stakeholder groups. A closely related internal effort will be to integrate existing Regional Board programs and improve internal communication and coordination to increase efficiency and provide better service. Through the combined efforts of many individuals, groups, and agencies with responsibilities and interests in the watershed, the Regional Board believes significant gains in water resource protection will be realized.

Description of the Salinas River Watershed

The watershed of the Salinas River and its tributaries covers approximately 4,600 square miles (nearly 3 million acres) and lies within San Luis Obispo and Monterey Counties (Figure 1). The Salinas River, which originates in San Luis Obispo County, flows northwestward into Monterey County, through the entire length of the Salinas Valley and empties into Monterey Bay. The watershed's main tributaries are the Arroyo Seco, Nacimiento, San Antonio, and Estrella Rivers. The two primary ground water basins within the Salinas watershed are the Salinas Valley Ground Water Basin and the Paso Robles Ground Water Basin (Figures 2 and 3).

The Salinas River drains a large watershed with a number of distinct tributaries; however, geographic, political, land use and ground water divisions facilitate discussion of the Salinas River watershed in terms of an upper and a lower watershed. The upper watershed begins at the headwaters of the Salinas River in the La Panza Range southeast of Santa Margarita Lake in San Luis Obispo County and flows to the narrows area near Bradley, just inside Monterey County. The upper watershed includes drainages of the Estrella, Nacimiento and San Antonio Rivers. The upper watershed overlies the Paso Robles Ground Water Basin and lies mainly in San Luis Obispo County. The lower watershed extends from the Bradley narrows area to Monterey Bay and includes the drainage of the Arroyo Seco River. The lower Salinas River watershed overlies the Salinas Ground Water Basin and is entirely within Monterey County.

Agriculture is the primary land use within the entire Salinas River watershed. Grazing and pasture lands and dryland farming have historically been the dominant land use in the upper watershed, but large areas in southern Monterey County and northern San Luis Obispo County are being converted to vineyards. Irrigated cropland is predominant in the lower watershed, primarily row crops such as lettuce, celery, broccoli and cauliflower on the valley floor, with grazing and vineyards on the upland areas. The lower watershed is one of the most productive agricultural areas in the world, with a gross annual value of nearly \$2 billion. The rapidly expanding wine-producing region in the upper watershed around Paso Robles is also becoming a highly productive agricultural area.

Urban development occurs primarily in a corridor along the Salinas River. The largest city, Salinas, has more than 100,000 people and is developing rapidly. Urban development in the upper watershed is occurring in the small cities of Santa Margarita, Atascadero, Templeton and Paso Robles, which are also growing rapidly.

In addition to agriculture and urban development, other land uses in the Salinas River watershed include two military facilities (Fort Hunter Liggett and Camp Roberts), exploitation of mineral and oil reserves in the San Ardo area and a few other locations throughout the watershed, and some public land and open space. The watershed has three dams, one on the upper Salinas River south of Santa Margarita, one on the Nacimiento River and one on the San Antonio River.

Assessment of Water Resource Issues

Staff completed a preliminary assessment of water resource issues in October 1997. Available monitoring data, although not exhaustive, indicate water quality impacts are widespread. Identified impacts include seawater intrusion in the coastal areas near Castroville and Salinas, nitrates in ground water and surface water, pesticides in sediment and animal tissues, mercury in Lake Nacimiento and its tributaries, and erosion and sedimentation. The Paso Robles Ground Water Basin includes an area where highly mineralized geothermal wells contribute to ground water pollution. Pollutants such as pesticides, nutrients and sediment are often associated with agricultural activities, although agriculture is not the only source. Other potential pollutant sources in the watershed are urban storm water runoff, mines, oil fields, geothermal areas, roads and highways, and point source discharges.

The Salinas River and several tributaries have been listed by the Regional Board on the Clean Water Act's 303(d) list of impaired water bodies. Impaired water bodies are those waters which do not fully support all of their designated beneficial uses. All waterbodies on the 303(d) list are scheduled for development and implementation of Total Maximum Daily Loads (TMDLs) within the next several years. Developing and implementing a TMDL is a process which includes identification of sources and allocation of load reductions needed to restore beneficial uses. TMDLs are further described below and in Appendix A, along with a table of currently scheduled TMDLs (Table One). The Regional Board will work closely with landowners and other stakeholders in the watershed to ensure that the watershed approach is coordinated with all TMDL efforts.

In January 1999, the Regional Board's Regional Monitoring Program began monitoring the Salinas River and some of its tributaries to provide current ambient water quality data. In addition, the Regional Monitoring Program has gathered water quality data from numerous agencies and is in the process of creating a complete bibliography of references and a database of water quality data for the Salinas River. The Regional Monitoring Program, along with landowner and citizen monitoring, and TMDL development, will enable the Regional Board to further refine its assessment of water resource issues over the next two years.

Regional Board Responsibilities and Regulatory Authority

The Regional Water Quality Control Boards have responsibility for protecting the quality of the waters of the State of California. Waters of the State are defined as any surface and ground waters, including saline waters, within the boundaries of the State. Regional Boards protect water quality by implementing a number of Federal and State laws and regulations, including the Federal Clean Water Act (CWA), the State Porter-Cologne Water Quality Control Act, and the Coastal Zone Act Reauthorization Amendments (CZARA).

The State Water Resources Control Board and the nine Regional Boards were established by the Porter-Cologne Water Quality Control Act nearly 30 years ago. Under Porter-Cologne (promulgated as Division 7 of the California Water Code), Regional Boards are required to develop water quality control plans (Basin Plans), which describe the Regional Board's approach

for protection of water quality. Basin Plans identify beneficial uses for all of the region's waterbodies, including rivers, streams, bays, estuaries, wetlands and ground water basins, and establish standards for water quality (water quality objectives) which ensure beneficial uses are protected. Objectives can be numeric (e.g. the concentration of nitrate in drinking water shall not exceed 45 milligrams per liter) or narrative (e.g. suspended sediment shall not adversely impact beneficial uses). The Central Coast Regional Board's Basin Plan lists twenty-two beneficial uses for the waterbodies of the region, including drinking water supply, agricultural water supply, recreation, aquatic habitat, fish migration, and fish spawning. Twenty are applicable to the Salinas River watershed.

The Regional Boards have been given very broad authority to protect water quality under Porter-Cologne, regardless of the source of pollution. The historical focus of the Regional Boards has been on controlling point source pollution, primarily through a system of state and federal permits. Several recent events have put much greater emphasis on nonpoint source pollution and legal requirements related to controlling it. In addition to water quality assessments which indicate nonpoint source impacts, these events include listings of steelhead trout and Coho salmon under the Endangered Species Act along much of the California coast, lawsuits against the Federal Environmental Protection Agency and the State of California for failure to implement provisions of the Clean Water Act related to impaired waterbodies (Total Maximum Daily Loads), and the required statewide upgrade of the Nonpoint Source Program to satisfy requirements of the CZARA.

Development and implementation of Total Maximum Daily Loads (TMDLs) and implementation of the Nonpoint Source Program will be key components of the Regional Board's watershed approach in the future. Waterbodies in the Region which are identified as impaired through water quality assessments are targeted for TMDL development. Implementation of TMDLs in the Salinas River Watershed will focus on greater control of nonpoint source pollution. The Regional Board will work with landowners, local watershed groups, local government and other partners in the development and implementation of TMDLs.

A list and description of Regional Board authority and programs applicable to the Salinas River watershed are included in Appendix A.

California's Watershed Management Initiative

In 1995 the State Water Resources Control Board and Regional Boards conducted an assessment of their effectiveness. The assessment resulted in the Board's Strategic Plan, which recommended, among other things, that Regional Boards begin to look at water quality issues on a larger, more comprehensive watershed scale. As a result, the State adopted the Watershed Management Initiative. Based on establishment of the Watershed Management Initiative, the Regional Board began active development of a more systematic approach to manage nonpoint sources of pollution, even in light of limited staff resources. The framework for determining the need to develop and implement a control strategy for a given nonpoint source pollution problem considers four factors: 1) the magnitude of the problem (through assessment), 2) the presence of

existing institutional and community action, acceptability, and/or willingness to partner in addressing problems (stakeholder involvement), 3) the presence of existing government agencies as potential responsible parties for controlling the problem, and 4) opportunities to coordinate with existing internal staff efforts (e.g., outreach, point source control strategies, monitoring). It became apparent that many regulatory and non-regulatory activities were already underway throughout the Region to address both point and nonpoint sources of pollution.

The Central Coast Regional Board designated the Salinas River watershed as one of its priority watersheds in 1996. A team of staff was formed to manage the traditional programmatic regulatory work in the watershed, including permit writing, enforcement, water quality certifications, and regulation of landfills, underground tanks, and cleanups. In addition, the team's charge was to develop a watershed management plan. The team wrote a two-year, task-oriented strategy (Strategy) to develop a Watershed Management Action Plan. Initial tasks included development of a comprehensive stakeholder list, an inventory describing the agencies, organizations, and groups active in the watershed along with their authority, interests, and current activities, as well as a preliminary assessment of water resource issues within the watershed. In addition to generating the Watershed Management Action Plan, the Strategy's final tasks included an evaluation of water resource issues.

For the past two years, staff has been working on completing the tasks of the Strategy document. To accomplish this effort, staff has taken the approach of participating in water quality and watershed based efforts that were already underway in the watershed with such agencies as Natural Resources Conservation Service, Resource Conservation Districts, University of California Cooperative Extension, the Water Quality Protection Program for the Monterey Bay National Marine Sanctuary, and Monterey County Water Resources Agency. The rationale for such an approach was to capitalize on existing efforts, develop relationships within the watershed, look for opportunities to link on-going efforts so as to preclude duplication of effort, and assess the need for further outreach by the Regional Board. Staff determined that with a more centralized approach to handling of Clean Water Act Section 401 Water Quality Certifications and California Environmental Quality Act (CEQA) review and comment, the Regional Board would be able to obtain a more complete picture of ongoing watershed activities.

Watershed management focuses on development of cooperative relationships within a watershed, with the intent of developing common goals. The challenge for a regulatory agency such as the Regional Board is to balance the time necessary to develop cooperative efforts to improve water quality with legal mandates which the Regional Board must meet. Nonpoint source pollution can only be controlled through widespread implementation of management practices by all land uses. The challenge over the next few years will be to develop better means of tracking implementation of management practices necessary to control nonpoint source pollution and to put into place monitoring and reporting procedures that can assure the Regional Board that regulatory requirements are being met, while preserving the flexibility and self-determination desired by landowners and others.

The watershed management action plan considers ways of incorporating existing regulatory responsibilities of the Regional Board into watershed management, and how to coordinate

Regional Board responsibilities with those of other organizations. The size of the Salinas River watershed and the level and types of activities may make it unique, but many of the agencies, organizations and programs will be the same in other watersheds.

Partners/Watershed Efforts in the Salinas River Watershed

A key component of an effective watershed management approach is developing partnerships. No one agency or individual can accomplish all that needs to be done to protect water resources in a watershed. Collaborative efforts have the most chance of enduring and producing long-term benefits. One of the initial efforts by staff was to compile a list of stakeholders in the watershed and an inventory of the many on-going efforts conducted by other organizations. The Regional Board is currently working with many of these groups whose efforts are focused on resource protection and reduction of nonpoint source pollution. Regional Board involvement includes attendance at meetings, participation on technical advisory committees, presentations at meetings and short-courses, and assistance with funding.

Appendix B contains a summary of several current efforts in the Salinas River watershed with which the Regional Board has involvement. This summary is not meant to be exhaustive, however, because new efforts are continually being initiated throughout the watershed.

Regional Board Watershed Management Activities in the Salinas River Watershed

The principal elements of the Regional Board's watershed approach are devoting additional resources (staff time and grant funding) to watershed activities and increasing Regional Board presence in the watershed through developing partnerships with local governments, resource agencies, citizen groups and landowners. A closely related internal effort will be to integrate existing Regional Board programs and improve internal communication and coordination to increase efficiency and provide better service to both point source dischargers and other constituents in the watershed.

Specifically, the following activities will receive priority in the coming two years:

1. Working with various current and new partners throughout the watershed to encourage development of cooperative projects that support a comprehensive watershed approach, using funding such as Clean Water Act planning and implementation funds;
2. Addressing existing program work such as permitting and inspections through adequate staffing and coordination among staff;
3. Encouraging and supporting expanded offerings and participation in the Ranch Water Quality Planning short courses as well as participating in the development and implementation of similar courses for vineyards and row crops;

4. Working with the State Farm Bureau Federation and the Six County Coalition of Farm Bureaus to implement the Farm Bureau's Nonpoint Source Initiative pilot projects as described in the Monterey Bay National Marine Sanctuary's Plan for Agricultural and Rural Lands;
5. Working as a member of the Sanctuary's Water Quality Protection Program to implement elements of existing plans, such as cross training for agency staff, streamlined permitting for water quality protection projects, and improved coordination between agencies;
6. Encouraging resource planning and the development of resource management plans, such as those promoted by Water Quality Planning short courses and the Central Coast Vineyard Team's positive point system;
7. Evaluating impacts from wine processing facilities and developing recommendations for consistent management;
8. Expanding outreach to cities, counties and urbanized areas regarding the Storm Water Program and upcoming requirements for municipal, industrial and construction storm water permits in conjunction with the Sanctuary's Model Urban Runoff Program;
9. Continuing participation in the Irrigated Agriculture Roundtable, which is sharing information among Regional Boards and working to better define the tiers and options of the Nonpoint Source Program as it relates to irrigated agriculture;
10. Continuing regular (monthly) briefing meetings for staff to share information, coordinate activities, strategize efforts and explore opportunities for streamlining and improved coordination of Regional Board programs (Appendix C lists possible points of discussion);
11. Intensifying efforts with Monterey County Water Resources Agency, other local agencies and partners to implement the action plans for managing nitrate pollution and seawater intrusion in the lower Salinas Valley Ground Water Basin;
12. Improving our understanding of, and initiating action planning for, the potential impacts from highly mineralized geothermal wells located in the Paso Robles Ground Water Basin and making recommendations to modify ground water objectives for the Paso Robles Ground Water Basin as appropriate;
13. Initiating TMDL outreach efforts for the Salinas River and tributaries for sediments, nutrients, pesticides and mercury;
14. Assisting with the development of the Regional Board's Regional Monitoring Program and encouraging widespread use of the data for watershed planning and TMDL development and implementation;

15. Encouraging more comprehensive, watershed-based approaches to issues of flood control, in-stream sand and gravel mining, and land use planning decisions; and
16. Supporting efforts to develop watershed-based approaches through development of coordinated funding efforts.

Milestones

To evaluate the effectiveness of the above activities and better protect water quality, the Regional Board will develop a tracking system for management practice implementation and establish a baseline inventory of currently implemented management practices for each major land use category (row crops, vineyards, rangeland, urban). The baseline information will be used to develop interim targets and timelines for widespread implementation of management practices to support both improved control of nonpoint source pollution and implementation of TMDLs.

The Regional Board will work to develop a prototype of management plans for watersheds or subwatersheds which will allow for flexibility and adequate time for implementation, incorporate monitoring, and satisfy accountability and regulatory reporting requirements through the Nonpoint Source Program.

In addition to the above nonpoint source efforts, the Regional Board will meet all workplan commitments for State Water Resources Control Board programs, including National Pollutant Discharge Elimination System permits and Waste Discharge Requirements.

Reassessment and Future Actions

By the end of fiscal year 2000-2001 (June 30, 2001), the activities described above will have been underway for two years, and milestones developed, giving the Regional Board a better understanding of the level and effectiveness of management practice implementation throughout the watershed. Several more Ranch Water Quality Planning short courses should have been offered as well as pilot courses for the Farm Water Quality Planning short courses, resulting in development and implementation of a number of farm and ranch plans. The Six County Farm Bureau Coalition's pilot project in Salinas should be underway and a protocol for providing information developed. In addition, a sediment TMDL will be developed and implementation begun. Staff will have been meeting on a monthly basis for two years and will have had time to explore the suggestions for improved coordination and streamlining of regulatory activities described in Appendix C.

Following the two year effort, the Regional Board can assess the information available and determine how future effort may be directed. Regional Board staff will evaluate the success of voluntary/self-determined compliance with the Nonpoint Source Management Plan (Tier I) by looking at levels of response, success of the Farm Bureau pilot projects, response to surveys and development of management plans, attendance and participation at short courses, numbers of

plans developed and implemented and whether information on management practices is adequate to assess progress. Regional Board will also assess effectiveness of efforts to improve erosion control, success of internal coordination efforts, and information provided by the Regional Board's Regional Monitoring Program.

Based on the above assessments, the Regional Board will consider whether progress toward improving water resources is adequate or if modification of the watershed management strategy is necessary. If voluntary/self-determined efforts to control nonpoint source pollution appear to be moving forward and participation is increasing, there may be no need for increased regulatory involvement. However, if two years of sustained effort by the Regional Board and its watershed partners does not appear to be increasing implementation of management measures, then other regulatory options may need to be considered. The Regional Board recognizes that improvements to water quality through control of nonpoint source pollution take time and direct water quality improvements cannot always be measured immediately. Therefore, other indicators will be looked at, as described above. The Regional Board has a legal responsibility to protect the waters of the State of California and must be able to show measurable progress toward water quality improvement. Staff will complete the assessments and intends to make further recommendations to the Board by December 2001.

Figure 1
Salinas River and Major Tributaries

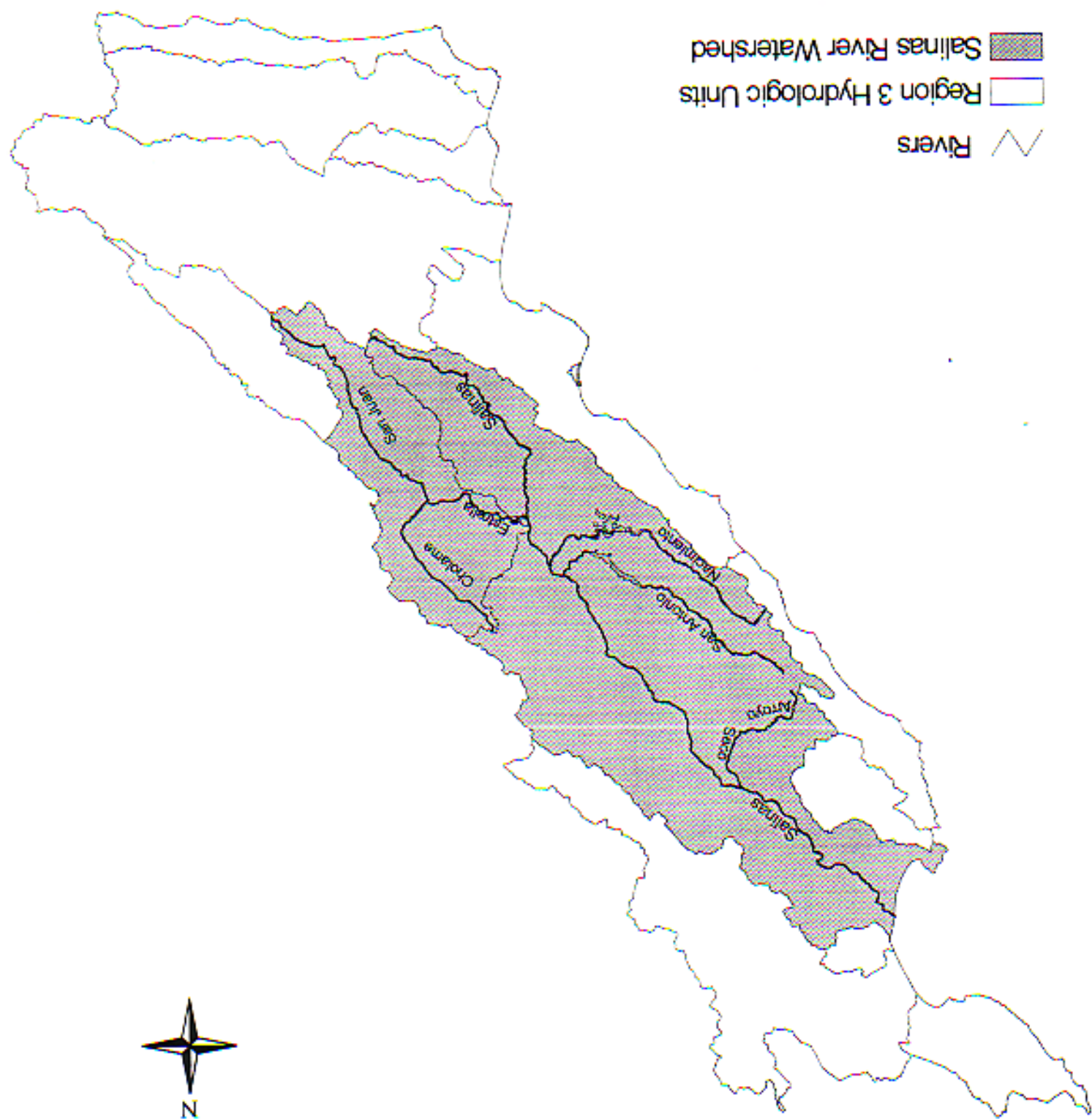


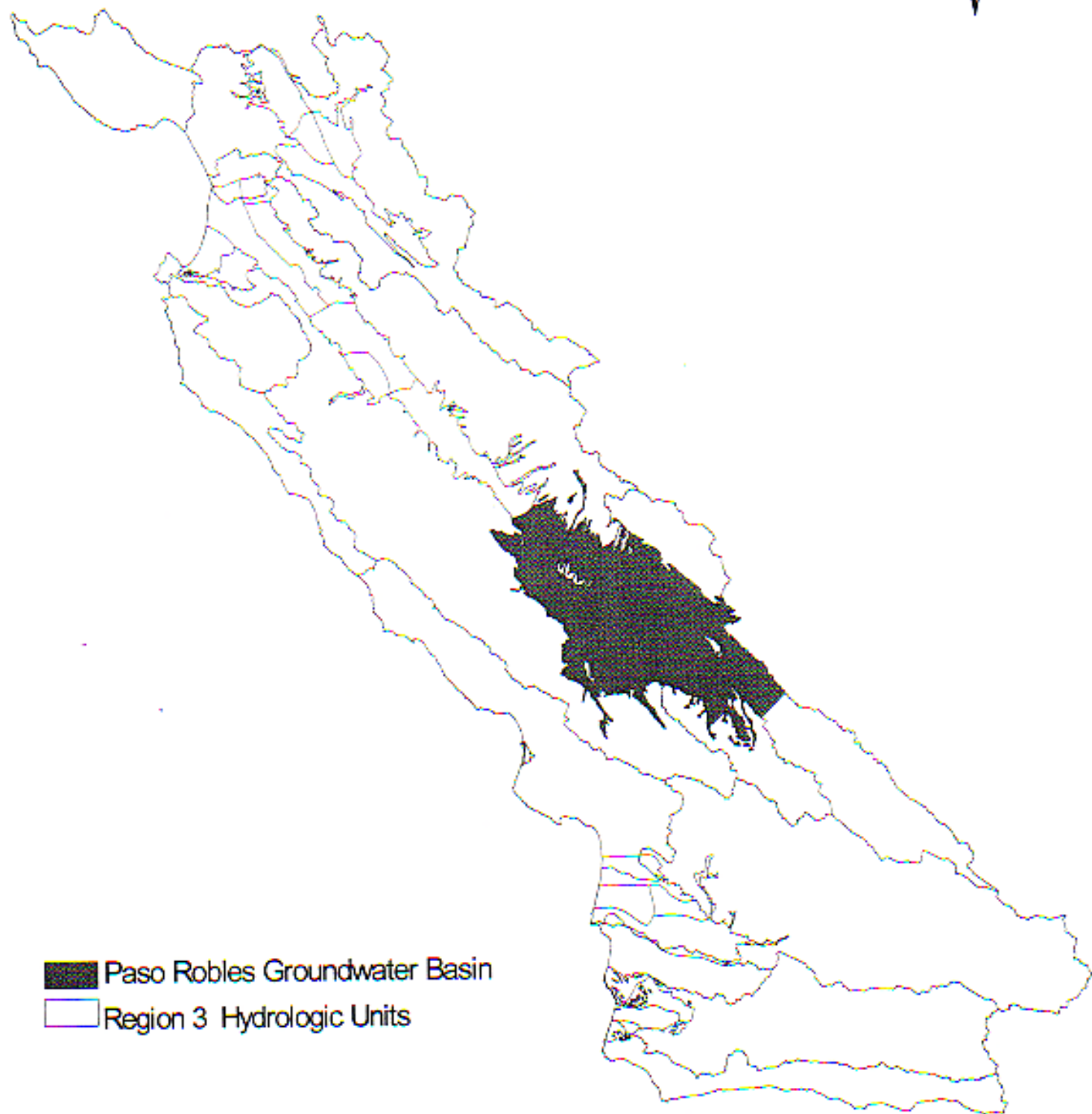
Figure 2

Salinas Valley Groundwater Basins



Figure 3

Paso Robles Groundwater Basin



Appendix A

List of Regional Board Regulatory Authority and Programs

Permitting of Point Source Discharges through Waste Discharge Requirements and Federal NPDES Permits

With the adoption of the Porter-Cologne Water Quality Control Act in 1969, the State of California set up a system for control of discharges to land through issuance of orders called Waste Discharge Requirements (WDRs), which are issued to many facilities, including industrial facilities, landfills, and many wastewater treatment plants. The National Pollutant Discharge Elimination System (NPDES) was established by the Federal Clean Water Act (CWA) in 1972 and gave authorized states such as California authority to issue federal permits for pollutant discharges to surface water. Both WDRs and NPDES permits require that the quality of discharges comply with certain established standards, and require monitoring and reporting.

Nonpoint Source Management Plan and Nonpoint Source Program/Coastal Zone Act Reauthorization Amendments (CZARA)

In 1987 the CWA was amended to include Section 319, requiring states to address nonpoint sources of pollution through development of management plans for controlling nonpoint sources. In 1988, California adopted the Nonpoint Source Management Plan, outlining a three-tiered approach of increasing regulatory involvement for controlling nonpoint source pollution. The three-tiers consist of: 1) voluntary/self-determined implementation of management measures to control nonpoint source pollution (Tier I), 2) regulatory-encouraged implementation of management measures, primarily through waiving Waste Discharge Requirements (Tier II), and 3) issuance of Waste Discharge Requirements (Tier III) in which management measure implementation is required.

California has chosen to upgrade and expand its Nonpoint Source Program to satisfy requirements of the U.S. Environmental Protection Agency (USEPA) and the National Oceanic and Atmospheric Administration (NOAA), which share responsibility for approval of state coastal programs. This effort resulted from Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA), which requires States to develop and implement management measures for nonpoint source pollution to restore and protect coastal waters. The State Water Resources Control Board (SWRCB), the nine Regional Water Quality Control Boards, and the California Coastal Commission (CCC) have shared responsibility for implementation of the approved program. California is currently in the process of completing its revised program and submitting it to the SWRCB and CCC for adoption, subject to final approval by USEPA and NOAA. The upgraded program will require greater accountability from the State and Regional Boards to show that management measures are being implemented to control nonpoint source pollution from a variety of land use activities, including urban areas, agriculture, forestry, hydromodification and marinas.

Storm Water Program

In 1987, Congress enacted a two-phased program under Section 402(p) of the Clean Water Act that requires National Pollutant Discharge Elimination System (NPDES) Permits for storm water discharges. As with the NPDES program for point source discharges, the NPDES Storm Water Program is administered through the State and Regional Boards. Since 1990, "Phase I" regulations have required NPDES permits for storm water discharges for (1) municipal separate storm sewer systems serving populations greater than 100,000, (2) specific industrial activities, and (3) construction activities disturbing five or more acres of land. "Phase II" regulations are scheduled for adoption in 1999. These regulations will expand the existing NPDES Storm Water Program to include smaller municipalities and construction sites that disturb between one and five acres. Phase II permits are anticipated to be required by May 31, 2002.

Clean Water Act Section 401 Water Quality Certifications

Section 401 of the CWA gives the Regional Board authority to review federal permitting actions related to work in waters of the State. Any U.S. Army Corps of Engineers permit issued pursuant to Section 404 of the CWA requires water quality review by the Regional Board to be valid. Section 401 Water Quality Certification gives the Regional Board the ability to protect wetlands through reviewing and conditioning any Section 404 permit.

Total Maximum Daily Loads (TMDLs)

Section 303(d) of the CWA requires States to periodically assess the quality of their waters and identify waterbodies that are not fully supporting their designated beneficial uses. Waterbodies, such as rivers, streams, lakes, bays and estuaries, that do not or are not expected to meet water quality standards after applying existing required controls, such as minimum sewage treatment technology, are targeted for TMDL development. TMDLs are derived by a process of assessing water quality problems, identifying sources, and determining load reductions or control actions needed to restore and protect beneficial uses of impaired waterbodies. The Salinas River and some of its tributaries have been listed on the CWA 303(d) list by the Regional Board for a number of pollutants. A TMDL for mercury is scheduled to be developed for Las Tablas Creek and Nacimiento Reservoir by June 2000. The first scheduled Salinas River TMDL (for siltation and sedimentation) is due to be completed by June 2001. Several others are scheduled for development over the next five years. TMDL development and implementation will be a phased process that will involve landowners and other throughout the watershed in widespread implementation of management measures that will reduce nonpoint source pollution.

Appendix B**List of Partners and Watershed Efforts in the Salinas River Watershed****Monterey Bay National Marine Sanctuary: Water Quality Protection Plans for Agriculture and Rural Roads**

The Water Quality Protection Program (WQPP) of Monterey Bay National Marine Sanctuary is a cooperative effort by many groups and agencies in the watersheds contiguous to the Sanctuary, including federal and state agencies, cities, counties, and representatives from industry. The WQPP has developed water quality plans for urban areas and marinas, and has been working with the State Farm Bureau Federation and Farm Bureaus in counties contiguous to the Sanctuary to develop and implement an action plan for agriculture. Regional Board staff has been extensively involved in developing the plans and will be working closely with cities, counties, local entities, the Farm Bureaus and WQPP to implement the plan.

California State Farm Bureau Federation/Six County Farm Bureau Coalition: Nonpoint Source Initiative Pilot Projects

The California State Farm Bureau Federation is developing a proactive, watershed-based approach to addressing nonpoint source pollution from agricultural activities. In the Monterey area, six local county Farm Bureaus have developed an agreement to work together to pilot the SFBF's Nonpoint Source Initiative through organizing watershed groups of landowners to implement management practices. Regional Board staff will be working with the Farm Bureaus to develop plans and monitoring and reporting protocols that will serve to satisfy TMDL and Nonpoint Source/CZARA requirements.

Monterey County Resource Conservation District (RCD): Eastside Erosion Control Project

The Monterey County RCD is implementing a CWA 319 project to control erosion and offsite migration of nutrients. This project is being considered as a location for the Farm Bureau pilot projects described above.

Monterey County Water Resources Agency: Salinas Valley Water Project/Nitrate Technical Advisory Committee/Castroville Seawater Intrusion Project

As part of the Salinas Valley Water Project, a Nitrate Technical Advisory Committee (NTAC) was convened in 1997 by Monterey County Water Resources Agency (MCWRA) to develop a Nitrate Management Plan to reduce the widespread contamination of ground water by nitrates. Staff attends NTAC meetings, manages the CWA 319(h) project by MCWRA to implement nitrate management practices and develop a survey of grower nutrient management practices, and is working to link the nitrate management effort with other agricultural nonpoint source outreach efforts such as the Monterey County RCD's project for erosion control and nutrient management. The Castroville Seawater Intrusion Project delivers recycled water to growers in the Castroville area to reduce pumping that is causing seawater intrusion.

Natural Resource Conservation Service: EQIP Local Work Groups

The Natural Resource Conservation Service (NRCS) is implementing U.S. Department of Agriculture's Environmental Quality Incentives Program (EQIP), which provides cost-share

funding to ranchers and farmers who implement practices which protect resources. NRCS convenes Local Work Groups, composed of landowners and staff from NRCS, University of California Cooperative Extension (UCCE), Resource Conservation Districts, Regional Boards and other interested parties. Local Work Groups identify priority areas and criteria for eligibility for cost share funds. EQIP also provides funding for educational projects and areas of special concern, including steelhead and salmon restoration projects. EQIP funds are supporting Ranch Water Quality Planning short courses and may be used to offer similar courses for irrigated agriculture in the future.

University of California Cooperative Extension: Ranch Water Quality Planning Short Courses The Rangeland Water Quality Management Plan (RWQMP) was developed with industry support and adopted by the State Water Resources Control Board in 1995. The goal of the RWQMP is to encourage voluntary efforts by ranchers to reduce nonpoint source pollution and develop resource management plans for their ranches that address water quality issues. Ranch Water Quality Planning Short Courses are offered by throughout California by University of California Cooperative Extension (UCCE) with participation by NRCS and Regional Boards. In the past year three short courses have been offered in the Salinas River watershed and more are proposed for the coming year.

University of California Cooperative Extension: Water Quality Planning Short Courses for Irrigated Agriculture

Currently, UCCE staff is developing and offering a short course for vineyards which is modeled after the Ranch Water Quality short courses. UCCE is interested in expanding the format to include row crops and has received grant funding from USDA to begin developing course materials. Regional Board staff will continue to assist with the development and implementation of the short courses and has given them priority for CWA Section 319(h) funding.

Upper Salinas Las Tablas Resource Conservation District: Erosion Control Training

The Upper Salinas and Las Tablas RCD has developed an educational brochure targeted at home builders to increase their awareness of erosion control measures. Staff has begun coordinating with the RCD to increase distribution and use of the brochure and is working with the RCD and with San Luis Obispo County to develop an erosion control training class designed specifically for county planners, inspectors and engineers.

County of San Luis Obispo: Master Water Plan Update

San Luis Obispo County is beginning a large public outreach effort as part of its revision of the current master water plan. Staff has been participating in meetings of the Water Resources Advisory Committee and the North County Water Task Force. The County is proposing to develop public participation in each water planning area, one of which encompasses most of the Upper watershed. Staff will continue to participate in meetings as appropriate as an avenue to increase public outreach in the upper watershed. In addition, the County is proposing to fund a study of the Paso Robles Ground Water Basin. Staff has listed a study of the basin in the current list of priorities for CWA Section 205(j) funds.

Atascadero Ground Water Guardian/Upper Salinas Watershed Coalition: Citizen Monitoring/Watershed Assessment

A local group has convened in Atascadero that is focusing on watershed protection through participation in the national Ground Water Guardian program and development of a citizen monitoring program. Their interests include ground water protection, urban stream restoration and watershed assessment.

American Watersheds: Watershed Assessment/Fluvial Geomorphological Analysis

A conservation partner with the Upper Salinas-Las Tablas Resource Conservation District, the group is focusing efforts in the Atascadero area and will eventually expand to other parts of the Upper Salinas and tributaries.

Sustainable Conservation/Natural Resources Conservation Service: Permit Streamlining Projects

Landowners are sometimes reluctant to initiate projects near streams which might have beneficial effects on water quality because of cost and the number of agencies and permits involved. The Natural Resources Conservation Service (NRCS) and Monterey County Resource Conservation District, as part of their erosion control work with landowners in Elkhorn Slough, in partnership with Sustainable Conservation, worked with agencies to develop a streamlined process for a specific list of management practices. Landowners now go directly to NRCS and are able to implement beneficial practices without contacting any other agencies. This has encouraged a large number of projects which might not otherwise have been implemented. Staff developed the CWA Section 401 Water Quality Certification for this project, and is managing a similar CWA 319(h) project for the Salinas River watershed. A similar approach is being considered for the upper watershed.

Central Coast Vineyard Team: Positive Point System

The Central Coast Vineyard Team is a group of winegrape growers that focuses education and outreach efforts on sustainable resource management in vineyards. The Team has developed a positive point system that allows growers to assess soil, water, nutrient and pest management practices. The Team also offers tailgate meetings for growers. Over the past three years more than 10,000 acres of vineyards in the Central Coast area have been evaluated using the positive point system.

Watershed Institute: Wetland Restoration Activities

The Watershed Institute has a number of wetland restoration projects underway in the Salinas River watershed. The Institute works with landowners and educational groups to increase awareness of the benefits of wetlands.

Ventana Wilderness Alliance: Citizen Monitoring

The Ventana Wilderness Alliance is a group which is conducting a citizen monitoring effort on the Arroyo Seco River to protect steelhead habitat.

Appendix C

List of Suggestions for Internal Coordination and Streamlining

- Combine review of WDR monitoring and reporting with storm water monitoring and reporting; investigate the feasibility of integrating into WDRs as permits are renewed.
- Develop and present workshops on upcoming NPDES Phase II Storm Water regulations, using the Model Urban-Runoff Guide and Region 2's construction erosion control materials as a starting point; workshops could be held in Monterey and San Luis Obispo counties, targeting municipalities, counties, developers and contractors.
- Increase coordination with municipalities and counties to improve oversight, increase our knowledge of potential problems, and increase awareness of erosion control among inspectors, contractors and developers; combine inspections (WDRs, NPDES and storm water).
- Develop and present workshop on road maintenance and erosion control techniques and issues for improved water quality protection.
- Work with counties to develop a streamlined process for submitting applications and coordinating site visits.
- Work with RCDs to increase outreach to homeowners regarding erosion control and work in streams; find venues for distribution of educational materials developed by RCDs.
- Combine workshops for road erosion control and construction with NPDES Phase II Storm Water erosion control (invite county staff from planning, public works and any other department, cover both topics).
- Coordinate oversight of Salinas River channel work with California Department of Fish and Game and MCWRA.
- Make presentations at annual training held by Salinas River Channel Coalition and MCWRA to increase compliance with CWA Section 404/401 Regional Permit for river channel maintenance.
- Review sand and gravel mining operations and integrate with TMDL development.
- Assign CWA Section 401 responsibility based upon type of project (road, stream restoration, etc.).
- Perform initial review and scheduling of permit revisions to coincide with TMDL development as feasible.

- Coordinate monitoring requirements for new permits with Regional Monitoring Program and MCWRA monitoring, if applicable.
- Coordinate inspections between staff as feasible.
- Consider watershed-level plans and monitoring, coordinated with TMDL development and the Regional Monitoring Program.
- Prioritize permitted sites and consider rescission of permits as feasible.
- Continue to manage underground storage tanks (USTs) in the Program-based unit; integrate the UST Program's water quality data with Regional Monitoring Program data in the long term.
- Determine the most efficient means of managing landfill regulation: either in a Program-based unit (similar to UST management), or by specialized staff within the watershed.
- Coordinate CEQA responses between the point and nonpoint source staff; use the existing standardized CEQA letter where appropriate.

TABLE ONE. SUMMARY SCHEDULE FOR TOTAL MAXIMUM DAILY LOAD DEVELOPMENT

SALINAS WATERSHED

Table One

303 (d) Listed Waterbody	Stressor	Date of TMDL Completion	Assess Further	Delist	Comments	TMDL Class
Blanco Drain ¹	Pesticides	4/2003 ²				Primary/High
Espinosa Slough ¹	Nutrients	2/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Espinosa Slough ¹	Pesticides/Priority Organics	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Las Tablas Creek ¹	Mercury	4/2000				Primary/High
Las Tablas Creek, North Fork ¹	Mercury	4/2000				Primary/High
Las Tablas Creek, South Fork ¹	Mercury	4/2000				Primary/High
Moro Cojo Slough ¹	Pesticide	4/2011 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Moro Cojo Slough ¹	Siltation	4/2011 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Nedimlento Reservoir ¹	Mercury	4/2000				Primary/High
Old Salinas River Estuary ¹	Nutrients	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Old Salinas River Estuary ¹	Pesticides	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas Reclamation Canal ¹	Pesticides/Priority Pollutants	4/2005				Primary/High
Salinas River ¹	Nutrients	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River ¹	Pesticides/Priority Pollutants	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River ¹	Salinity	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River ¹	Siltation	4/2001 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River Lagoon (North) ¹	Nutrients	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River Lagoon (North) ¹	Pesticides	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River Lagoon (North) ¹	Siltation	4/2001 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River Lagoon (South) ¹	Nutrients	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River Lagoon (South) ¹	Pesticides	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Salinas River Lagoon (South) ¹	Salinity/TDS/Chlorides	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Tembladero Slough ¹	Nutrients	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High
Tembladero Slough ¹	Pesticides	4/2003 ²	X		Collect Water Quality Data by 3/2000	Primary/High